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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/021,026	12/19/2001	Kazuma Sekiya	SAS-0204	9558

7590

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EXAMINER

PRONE, JASON D

ART UNIT

PAPER NUMBER

3724

DATE MAILED: 03/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/021,026

Applicant(s)

SEKIYA, KAZUMA

Examiner

Jason Prone

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 10 February 2004.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1 and 2 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1 and 2 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ishiwata et al. in view of Hasenau and Gerber. Ishiwata et al. discloses the invention including a cutting machine (Fig. 7) with a chuck table for holding a work piece (11), an X-axial feeder means for feeding the chuck table with the work piece in an X-axial direction (70), first and second cutting means (22 and 23) each having a spindle arranged in the Y-axial direction perpendicular to the X-axial direction (Fig. 8A), that the first and second cutting means are arranged that rotary axes of the spindles may be aligned with each other with their rotary blades facing each other (Figs. 5 and 8A), and that each rotary blade comprises a circular cutting blade (22 and 23) having an annular hub integrally connected to one side (Fig. 7), (Fig. 10) but fails to disclose that each spindle has the rotary blade mounted with its hub directed inside, leaving no projections outside, thus permitting each cutting blade to face the counter cutting blade without anything intervening in-between and a water jet nozzle means in the vicinity of blade. Hasenau teaches that each spindle has the rotary blade mounted with its hub directed inside, leaving no projections outside, thus permitting each cutting blade to face the counter cutting blade without anything intervening in-between (E). Therefore, it would have

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been obvious to one of ordinary skill in the art, at the time of the invention, to have provided Ishiwata et al. with rotary blades mounted with its hub directed inside, as taught by Hasenau, allowing the blades to come closer together permitting the cutting of narrow work pieces.

Gerber teaches a water jet nozzle means in the vicinity of blade (Column 6 lines 44-50). Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have provided Ishiwata et al. with a water jet nozzle means, as taught by Gerber, to cool the blade.

3. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ishiwata et al. in view of Hasenau and Gerber as applied to claim 1 above, and further in view of Farnworth et al. Ishiwata et al., Hasenau, and Gerber disclose the invention but fail to disclose a blade defect detecting means comprising light emitting and light receiving elements. Farnworth et al. teaches a blade defect detecting means comprising light emitting and light receiving elements (Column 3 lines 11-56). Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have provided Ishiwata et al. in view of Hasenau and Gerber with a blade defect detecting, as taught by Farnworth et al., to determine when a blade should be replaced.

### ***Response to Arguments***

4. Applicant's arguments filed 10 February 2004 have been fully considered but they are not persuasive. The primary reference, Ishiwata et al., discloses the correct thickness of the blades, that each of the blades corresponds to each of the grooves independently, and that the blades are aligned vertically. The Hasenau Patent only has

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to do with modifying the Ishiwata et al. Patent to incorporate spindles that have the rotary blade mounted with its hub directed inside, leaving no projections outside, thus permitting each cutting blade to face the counter cutting blade without anything intervening in-between. Hasenau, clearly, teaches that the having spindles with their rotary blades mounted with their hubs directed inside and leaving no projections outside is old and well known in the art. Therefore, the rejection is valid and will remain.

### ***Conclusion***

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason Prone whose telephone number is 703-605-4287. The examiner can normally be reached on 7:30-5:00, Mon - (every other) Fri.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Allan N. Shoap can be reached on 703-308-1082. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



JP  
March 19, 2004



Allan N. Shoap  
Supervisory Patent Examiner  
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